<u>IN THE SPECIFICATION</u>

Please replace the paragraph at page 45, line 8 to page 46, line 3, with the following rewritten paragraph:

The above-described processing is described next with reference to Fig. 8. That is, at step S42 shown in Fig. 7, as shown in Fig. 8, if the ~~human~~ <u>right</u> eye 502 in a frame n-1, for example, is specified as the tracking point 501, a predetermined area including the tracking point 501 is specified as a region estimation range 533 at step S43. At step S24, it is determined whether a sample point within the region estimation range 533 can be estimated in the next frame. In the example shown in Fig. 8, in the frame n+1 subsequent to the frame n, since the left half area 534 including the ~~left~~ <u>right</u> eye 502 is covered by the ball 521, the motion of the tracking point 501 in the frame n cannot be estimated in the next frame n+1. Therefore, in such a case, one point is selected from among points in the region estimation range 533 (the face 504 as a solid body including the right eye 502) prepared as the transfer candidates in advance in the temporary previous frame n-1. For example, the left eye 503 contained in the human face 504 and, more precisely, one pixel in the left eye 503 is selected here. The selected point is determined to be the tracking point in the frame n+1.

Please replace the paragraph at page 112, lines 5-7, with the following rewritten paragraph:

The audio processing unit 1707 demodulates the audio signal input from the tuner 1701 and outputs the demodulated signal to a speaker ~~708~~ <u>1708</u>.

Please replace the paragraph at page 115, lines 5-21, with the following rewritten paragraph:

This zoom process can be executed by using an adaptive classification technique proposed by the present inventor. For example, Japanese Unexamined Patent Application Publication No. 2002-196737 describes a technology in which a 525i signal is converted to a 1080i signal using a coefficient obtained by a pre-training process. This process is virtually the same process to enlarge an image by a factor of 9/4 in both vertical direction and horizontal direction. However, the number of pixels in the image display ~~706~~ 1706 is fixed. Accordingly, in order to, for example, generate a 9/4 times larger image, the zoom image generation unit ~~704~~ 1704 can generate a zoom image by converting a 525i signal to a 1080i signal and selecting a predetermined number of pixels at the center of which is the tracking point (the number of pixels corresponding to the image display ~~706~~ 1706). In order to reduce the image, the reverse operation is executed.

Please replace the paragraph at page 119, line 20 to page 120, line 8, with the following rewritten paragraph:

In this case, the image processing apparatus [[1]] 1801 is configured as described in, for example, Fig. 66. A central processing unit (CPU) 1931 executes various processing in accordance with a program stored in a read only memory (ROM) 1932 or a program loaded from a storage unit 1939 into a random access memory (RAM) 1933. The RAM ~~233~~ 1933 also stores data needed for the CPU 1931 to execute the various processing as needed.

Please replace the paragraph at page 128, lines 10-21, with the following rewritten paragraph:

At step S835, the frequency distribution computing unit 2322 computes the frequency distribution of motions. More specifically, when an x coordinate and a y coordinate of a motion vector serving as a candidate of a background motion are represented in the range of ±16 pixels from a reference point, the frequency distribution computing unit 2322 prepares 1089 (($=16\times2 + 1)\times(16\times2 + 1)$) boxes, that is, boxes corresponding to the coordinates of the possible points of the motion vector. When a motion vector occurs, the frequency distribution computing unit 2322 increments the coordinates corresponding to the motion vector by 1. Thus, the frequency distribution of motion vectors can be computed.

Please replace the paragraph at page 153, line 25 to page 154, line 7, with the following rewritten paragraph:

At step S1002, the object tracking unit 3026 executes a tracking process to track the tracking point detected at step S1001. Thus, the tracking point (e.g., the eye or a center of a head) of the object (e.g., human being or animal) to be tracked in the image captured by the image capturing unit ~~8021~~ 3021 is tracked. The positional information indicating the tracking point is output to the area setting unit 3025.

Please replace the paragraph at page 155, lines 4-14, with the following rewritten paragraph:

At step S1006, the object tracking unit 3026 detects the movement of the object on the basis of the tracking result from the process at step S1002 and generates a camera driving signal to drive the camera so that the image of the moving object can be captured. The object tracking unit 3026 then output the camera driving signal to the control unit ~~3027~~ 3029. At

step S1007, the camera driving unit 3027 drives the image capturing unit 3021 on the basis of the camera driving signal. Thus, the image capturing unit 3021 pans or tilts so that the tracking point is always located inside the screen.

Please replace the paragraph at page 157, line 15 to page 158, line 8, with the following rewritten paragraph:

The correction area 3052 corresponding to the moving object 3051 (the tracking point 3051A) is set as follows, for example. Fig. 83 illustrates an example in which a rectangular area having a predetermined size is set around the tracking point as a correction area. In Fig. 83, a correction area 3071A is set first. For example, a predetermined area at the center of which is the tracking point 3051A is set as the first correction area 3071A. If a user specifies the correction area, this area is set as the first correction area 3071A. At that time, the area setting unit ~~25~~ <u>3025</u> stores the coordinates (X, Y) of the upper left corner of the correction area 3071A in the internal memory thereof. If the tracking point 3051A of the object 3051 moves, the object tracking unit 3026 starts tracking so that information about the positions (or the moving distance) of the tracking point 3051A in the X-axis direction (horizontal direction in the drawing) and in the Y-axis direction (vertical direction in the drawing) is delivered to the area setting unit 3025 as the tracking result.

Please replace the paragraph at page 162, line 15 to page 163, line 2, with the following rewritten paragraph:

A control signal C is a signal used for instructing to switch a weight Wa of a relational expression used for solving a model expression of blurring, which is described below. The control signal C is delivered to the address computing unit 3743. A control signal D is a signal used for instructing to switch a threshold value used for detecting the

feature of an image. The control signal D is delivered to the image feature detection unit ~~742~~ 3742. The control signals C and D may be predetermined in consideration of the characteristic of the security camera system 3001. Alternatively, the control signals C and D may be generated on the basis of the user instruction via the control unit 3027.

Please replace the paragraph at page 164, line 23 to page 165, line 7, with the following rewritten paragraph:

As noted above, the level of blurring varies depending on the above-described parameter σ. Therefore, to accurately correct the blurring of an image, the value of the parameter σ needs to be appropriately determined. According to the present invention, the user specifies the value of the parameter σ. Alternatively, an optimum value may be preset in consideration of the characteristic of the security camera system [[1]] 3001.

Please replace the paragraph at page 166, lines 18-23, with the following rewritten paragraph:

Figs. 88 and 89 illustrate a relationship between Fig. 86A and Fig. 86C in two dimensions. That is, the level of each pixel in Fig. ~~84~~ 88 is an observed value and is obtained using the level of each pixel in Fig. 89 as a real value. In this case, the observed value Y(x, y) corresponding to a pixel A shown in Fig. 88 can be obtained as follows:

Please replace at page 166, line 25, with the following:

[[(]]Y(x, y) = W(-2,-2)X(x-2, y-2) +W(-1,-2)X(x-1, y-2)

Please replace the paragraph at page 176, lines 3-9, with the following rewritten paragraph:

At step S1802, the image correction unit ~~22~~ 3022 acquires the value of the parameter σ. The value of the parameter σ may be specified by the user or may be determined in advance. At step S1803, the image correction unit 3022 also executes an image correction process, which is described below with reference to Fig. 93. By this process, the blurred image is corrected and is output.

Please replace the paragraph at page 178, lines 3-9, with the following rewritten paragraph:

At step S1825, the image combining unit 3747 executes an image combining process, which is described below with reference to Fig. 97. Thus, it is determined whether the processing result of the inner-product computing unit 3746 is output or the input image is directly output for each pixel. At step S1826, the ~~post-processing~~ image combining unit 3747 outputs the corrected and selected image.

Please replace the paragraph at page 181, lines 5-22, with the following rewritten paragraph:

That is, the block difference B(1) is the sum of absolute differences between the levels of pixels in the block 3881 (middle) and the levels of the corresponding pixels in the block 3884 (bottom). Similarly, the block difference computing unit 3842-2 computes the sum of absolute differences between the levels of pixels in the block 3881 (middle) and the levels of the corresponding pixels in the block 3885 (right) so as to obtain a block difference B(2). Furthermore, the block difference computing unit ~~3842-3~~ 3842-4 computes the sum of absolute differences between the levels of pixels in the block 3881 (middle) and the levels of

the corresponding pixels in the block 3882 (top) so as to obtain a block difference B(3). The block difference computing unit 3842-3 computes the sum of absolute differences between the levels of pixels in the block 3881 (middle) and the levels of the corresponding pixels in the block 3883 (left) so as to obtain a block difference B(4).

Please replace the paragraph at page 181, line 24 to page 182, line 5, with the following rewritten paragraph:

At step S1842, as noted above, the block differences B(1) to B(4), which are the differences between the middle block and each of the blocks in the four horizontal and vertical directions, are computed. The results are output to the corresponding threshold value determination units 3843-1 to 3843-4 and a minimum direction determination unit ~~844~~ 3844.

Please replace the paragraph at page 184, lines 7-15, with the following rewritten paragraph:

This design allows the code "1000" to be output from the minimum direction determination unit 3844 as the code p2 even when the threshold value determination units 3843-1 to 3843-4 output the code "0000". When the output result from the threshold value determination units 3843-1 to 3843-4 is not "0000", the output result from the threshold value determination units 3843-1 to 3843-4 is output as the code p2. At step S3844, the code p2 is thus generated and is output to the address computing unit ~~743~~ 3743.

Please replace the paragraph at page 185, lines 10-21, with the following rewritten paragraph:

If the inner-product computing unit 3746 performs the inner product computation on a pixel in a partial area of the input image where blurring does not occur, the activity of the

image around the pixel may increase, and therefore, the quality of the image may deteriorate. ~~Here~~ So, if the degree of dispersion is greater than the predetermined threshold value, it is determined that the pixel is a deteriorated pixel and the input-image switching flag is set to ON. The pixel whose input-image switching flag is set to ON is replaced with the pixel of the input image (i.e., the pixel is returned to the original pixel) when the pixel is output.